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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
L. Robert Deardurff	) Group Art Unit: 1544 )
Serial No. 10/780,494	) <ul><li>Examiner: Samuel A. Acqual</li></ul>
Filed: February 17, 2004	)
For: PROCESS FOR PREPARING	) Attorney Docket 1-37235
VALUE-ADDED RPET CONTAINING	. )
POLYMER BLEND COMPONENT	)

November 7, 2006

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# BRIEF ON APPEAL TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

#### Honorable Sir:

This is an appeal from the action of the Examiner dated August 21, 2006, finally rejecting Claims 1-5 in the above-identified patent application. This Brief on Appeal is being filed under the provisions of 37 CFR §41.37.

The Commissioner is hereby authorized to charge any necessary fees to Deposit Account No. 50-3156 for Fraser Martin & Miller LLC. A verified statement establishing small-entity status was previously filed.

A decision on whether to request an oral hearing will be made after the Examiner's Answer has been received.

#### I. REAL PARTY IN INTEREST

The Inventor, L. Robert Deardurff, has assigned all rights in the invention and instant application to Phoenix Technologies International, LLC, a corporation organized and existing under the laws of the State of Ohio.

#### II. RELATED APPEALS AND INTERFERENCES

The are no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on, the Board's decision in this pending Appeal.

#### III. STATUS OF CLAIMS

Claims 1-5, inclusive, are pending in the application, stand finally rejected, and are being appealed herein. Originally-filed Claims 6-10 were cancelled in an earlier-filed Office Action response.

#### IV. STATUS OF AMENDMENTS

There are no amendments pending in the application.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellant's invention as set forth in independent Claim 1 is directed to a process for preparing a recycled polyethylene terephthalate (RPET) blend component. The process comprises the steps of:

- providing a quantity of RPET particles having an average mean particle size from about 500 microns to about 5 microns (Paragraph 13 of US2005/0267282 A1);
- 2) adding a specialty additive to the RPET particles (Paragraph 14); and
- 3) mixing the RPET particles and specialty additive, to prepare a homogeneous blend of RPET carrier and specialty additive (Paragraph 15).

Dependent Claims 2-3 contain at least the same elements and limitations as Claim 1.

Appellant's invention as set forth in independent Claim 4 is direct to another embodiment of a process for preparing an RPET blend component, comprising the steps of:

- A) providing RPET particles having an average mean particle size from about 500 microns to about 5 microns (Paragraph 13 of US2005/0267282 A1);
- B) adding a specialty additive to the RPET particles, said specialty additive selected from the group consisting of colorants, toners, dyes, ultraviolet blocking agents, oxygen scavengers, gas diffusion barrier agents, antioxidants, acetylaldehyde reduction additives, slip agents, lubricants, fillers, and mixtures thereof (Paragraph 14); and
- C) mixing the RPET particles and specialty additive, to prepare a homogeneous blend of RPET carrier and specialty additive (Paragraph 15).

Dependent Claim 5 contains at least the same elements and limitations as independent Claim 4.

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL ISSUE:

Whether Claims 1-5 are unpatentable under 35 USC 102(b) as anticipated by U.S. Patent No. 5,075,057 to Hoedle (Hoedle) and U.S. Patent No. 5,565,158 to Sullivan et al. (Sullivan).

#### VII. ARGUMENT

Anticipation under 35 USC 102(b) requires that each element and limitation of the claimed invention be disclosed in the cited reference.

Hoedle discloses the manufacture of molded composites from scrap plastics. Hoedle is directed to the blending of multiple materials containing both thermosetting and thermoplastic materials that are shredded, not to improve the material's performance, but to make sure the admixture of the blend is relatively consistent. This admixture is then blended with a filler/reinforcement so as to be able to compression mold articles that are essentially isotropic. Hoedl does not teach mixing a specialty additive with RPET particles, as set forth in steps 2 and B above. Thus, Hoedle fails to teach the preparation of a homogeneous blend of RPET particles and a specialty additive, as claimed in steps 3 and C above.

By contrast, Appellant's invention is directed to adding a specialty material that is totally miscible with particles of RPET, to prepare a homogeneous mixture that can be further processed by, for example, blending with virgin or recycled PET at a specific dosage and thereby appropriately diluting it into the bulk material. The inventive process reduces the need for a manufacturer to add both a recycled material and a specialty material in separate steps. This inventive process allows for the highly concentrated addition of a specialty additive, such as for example a colorant, to a carrier polymer, to form a homogeneous mixture that may subsequently be diluted during ultimate use. Appellant's claimed process prepares a material intended for use in other processes, for the further blending and processing of plastics. Hoedl's process only concerns the preparation of a material that is thereafter immediately compression molded into a final form.

Sullivan discloses a process for recycling mixed polymer wastes. The process contemplates the mixing of incompatible polymers to form an agglomerate, which is then spun into fibers. Sullivan does not disclose the use of particles of RPET, having the size range set forth in the Claims, for addition with a compatible specialty additive, in order to provide a concentrated, homogeneous material for further admixing and processing.

#### **CONCLUSION**

It is respectfully submitted that neither Hoedle nor Sullivan anticipates Appellant's process as set forth in Claims 1-5. Accordingly, Appellant respectfully requests that the Board reverse the Examiner's rejection of Claims 1-5.

Respectfully submitted,

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#### **CLAIMS APPENDIX**

1. (original) A process for preparing an RPET polymer blend component, including an RPET carrier and a specialty additive, comprising:

providing a quantity of RPET particles having an average mean particle size from about 500 microns to about 5 microns;

adding a specialty additive to the RPET particles; and mixing the RPET particles and specialty additive, to prepare a homogeneous blend of RPET carrier and specialty additive.

- (original) The process for preparing an RPET polymer blend component according to Claim 1, wherein the average mean particle size of the RPET particles ranges from about 300 microns to about 15 microns.
- 3. (original) The process for preparing an RPET polymer blend component according to Claim 1, wherein the specialty additive is selected from the group consisting of colorants, toners, dyes, ultraviolet blocking agents, oxygen scavengers, gas diffusion barrier agents, antioxidants, acetylaldehyde reduction additives, slip agents, lubricants, fillers, and mixtures thereof.

4. (original) A process for preparing an RPET polymer blend component, including an RPET carrier and a specialty additive, comprising:

providing RPET particles having an average mean particle size from about 500 microns to about 5 microns;

adding a specialty additive to the RPET particles, said specialty additive selected from the group consisting of colorants, toners, dyes, ultraviolet blocking agents, oxygen scavengers, gas diffusion barrier agents, antioxidants, acetylaldehyde reduction additives, slip agents, lubricants, fillers, and mixtures thereof; and

mixing the RPET particles and specialty additive, to prepare a homogeneous blend of RPET carrier and specialty additive.

- 5. (original) The process for preparing an RPET polymer blend component according to Claim 4, wherein the average mean particle size of the RPET particles ranges from about 300 microns to about 15 microns.
- 6. (cancelled)
- 7. (cancelled)
- 8. (cancelled)
- 9. (cancelled)
- 10. (cancelled)

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## **EVIDENCE APPENDIX**

None

### **RELATED PROCEEDINGS APPENDIX**

None